Scientific Note

ALTITUDINAL DISTRIBUTION AND PHENOLOGY OF THREE SPECIES OF CARRION BEETLES (COLEOPTERA: SILPHIDAE) FROM NEVADO DE COLIMA, JALISCO, MÉXICO

The taxonomy of carrion beetles (Coleoptera: Silphidae) from México was revised by Peck, S. B. & R. S. Anderson (1985. Quaest. Ent., 21(3): 247–317) who recorded eleven species belonging to four genera. Other contributions, especially for Jalisco State include: Volcán de Tequila (Navarrete-Heredia, J. L. 1995. Dugesiana, 2(2): 11–26); Sierra de Manantlán (Rivera-Cervantes, L. E. & E. García-Real. 1998. Dugesiana, 5(1): 11–22), and La Primavera and Barranca del Río Santiago (Navarrete-Heredia, J. L. & H. E. Fierros-López. 1998. Dugesiana, 5(1): 49–50). This study was done in Jalisco by staff members from the Center for Zoological Research, University of Guadalajara to determine carrion beetle distribution. In this note, we describe our trapping results from the National Park Nevado de Colima, Jalisco, México.

Field work was done on the NW slope of the National Park Nevado de Colima, in the locality El Floripondio, Cerro Las Víboras, San Gabriel County, between 2200–3000 meters above sea level (m). We used carrion traps (model NTP-80) designed by Morón, M. A. & R. Terrón [1984. Acta Zool. Mex. n.s., (3): 1–47]. Six sites were selected: *Cupressus* forest (2300 m), oak-pine forest (2400 m), cloud forest (2600 m), *Abies* forest (2840 m), disturbed *Abies* forest (2920 m), and *Abies*-grass association (2950 m). One carrion trap was used for each site during one month, starting in April and ending in October 1998. Rotting squid was used as bait.

Three species of carrion beetles were collected: Oxelytrum discicolle (Brullé),

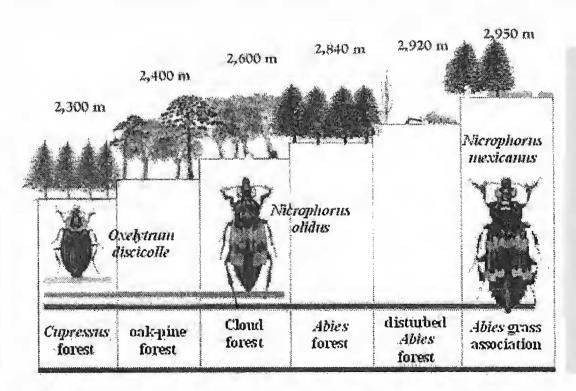


Figure 1. Altitudinal distribution of three Silphidae species from El Floripondio, Jalisco, collected with carrion traps.

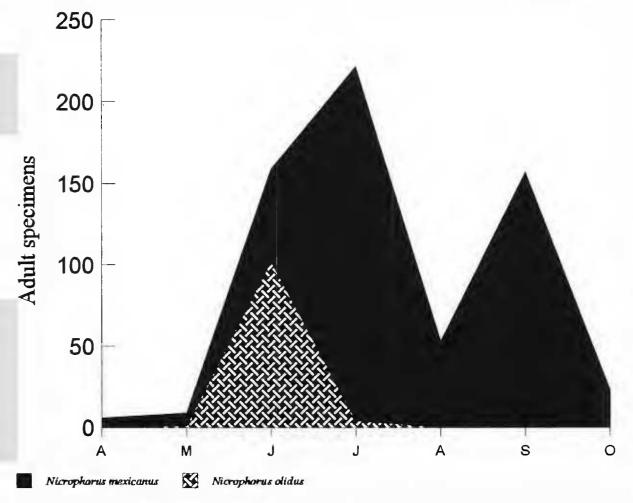


Figure 2. Abundance of *Nicrophorus mexicanus* and *N. olidus* from El Floripondio, Jalisco, collected with carrion traps between April and October, 1998.

Nicrophorus mexicanus (Matthews) and Nicrophorus olidus (Matthews). These species were represented by 743 specimens. Nicrophorus mexicanus was the commonest species (628 specimens), and was collected monthly and distributed between 2300–2950 m. Nicrophorus olidus was the second most common species, represented by 107 specimens, found between 2300–2600 m, but collected only during May–August (Fig. 1). Finally, only eight specimens of O. discicolle were collected in the Cupressus forest in June. Other Mexican localities demonstrating similar silphid abundance and distribution include: Volcán de Tequila, Jalisco (Navarrete-Heredia, 1995); Sierra de Manantlán (Rivera-Cervantes & García-Real, 1998) and Cofre de Perote, Veracruz (Arellano, L. 1998. Dugesiana, 5(2): 1–16). In all of them, Nicrophorus species are well represented, mostly at higher elevations, whereas O. discicolle is less abundant and restricted to lower places.

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